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AUTHOR
Jablonsky, Adelaide, Ed.

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ABSTRACT
This bibliography, the third of a series of five reports of selected literature included in the ERIC system, three of which have been completed, is comprised specifically of items relating to the employment problems, programs, and prospects of the school dropout. In addition to the listing being extensively annotated, it is arranged in the following groups: data collection and analysis, program planning, program descriptions, and program evaluation and follow-up. A brief review of "The World of Work" of the school dropout precedes the bibliography. See "The School Dropout" and "School Dropout Programs" for related documents by the same editor. (RJ)

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ERIC-IRCD URBAN DISADVANTAGED SERIES

Number 11, March 1970

THE SCHOOL DROPOUT AND THE WORLD OF WORK

A REVIEW OF THE ERIC LITERATURE

Adelaide Jablonsky, Ed.D.

Senior Research Associate
ERIC-IRCD
Horace Mann-Lincoln Institute
Teachers College
and
Associate Professor
Ferkauf Graduate School of
Humanities and Social Sciences
Yeshiva University
New York, New York 10003

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MARCH 1970

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Introduction

The phenomenon of the "school dropout" is a product which has been forged by several converging forces during the last several decades. There was little concern in this country with dropouts before child labor laws inhibited the omnivorous industrial establishment from utilizing children and adolescents for its less skilled tasks. The youth who left school because of poverty in order to apprentice himself to an artisan, craftsman, or mechanic was doubly rewarded, by an appreciative family and by an enhanced self image. Those children who were lucky enough to get an apprenticeship were set for life once it was completed. They emerged as skilled craftsmen. Rural and urban youth were urgently needed for the innumerable unskilled and semi-skilled jobs opening up in an expanding industrial economy. These facts also applied to girls who were needed for menial jobs in textile factories, clothing manufacturing firms and as domestics. There were jobs which needed to be filled, albeit low paying ones, and most young people had little choice but to opt for work instead of for an education.

As late as the 1920's less than 20 percent of school-aged youth completed a high school program. In the intervening years however the development of strong unions which protected their workers from the use of lower paid youth, the greater technological advances which increased production with less manpower, the population expansion resulting from higher birth rates rather than from adult immigration, the shift of emphasis from unskilled to skilled tasks, and the enforcement of compulsory education laws have compelled youth to either submit to an extended dependent role as students or to accept one of the possible alternatives, such as low-paying employment, idleness, or delinquency. None of these are optimal and all place a youth in the category of "school dropout."

The conscience of government, industry, and the educational system has been aroused by this problem and by the consequent problems of wasted human potential and delinquency. Measures have been proposed and implemented with varying degrees of effectiveness. In an attempt to clarify the current status of these measures, IRCD has prepared five reports of selected literature included in the ERIC indexes of documents (Research in Education) which are available on microfiche.

This review and annotated bibliography is one in the series which includes:

The School Dropout	UD 09 900
School Dropout Programs	UD 09 901
The School Dropout and the World of Work	UD 09 902
The Neighborhood Youth Corps	UD 09 903
The Job Corps	UD 09 904

In addition to the above, the IRCD Bulletin, volume IV no. 4, September 1968 The School Dropout Today by Abraham J. Tannenbaum, Ph.D., ED 028 209, includes an appraisal of the factors contributing to the problem and a bibliography. For an extended paper on this topic see ED 021 888.

A Bibliography of Selected Books on the School Dropout, UD 09 905, includes references to current available published literature and documents in the local IRCD library.

For references concerning the years 1960-1965 a rather comprehensive resource is A Bibliography of Published and Unpublished Vocational and Technical Education Literature, CORPLAN Associates, Chicago, Illinois. June 1966. ED 018 531.

The Bibliography on Urban Education, Harvard University, Cambridge, Massachusetts, April 1966, includes references from 1961-1965.

The School Dropout: The World of Work

For most members of our society money is a symbol of worth. Work brings to the individual both money and a feeling of achievement. Money and a sense of accomplishment are in short supply among the poor. In order for youth to take their places as adults in a productive society they must be prepared to fill unskilled, semi-skilled or skilled positions in service or productive roles. One of the basic functions of education should be to help students climb the skill ladder to their full potential so that they, and society, may flourish by their labor.

The field of vocational and technical education has received much federal, state and local support in the last forty years and even more so in the last decade as awareness developed at all levels that education, dropout rates, delinquency, and unemployment were interrelated and a serious concern of society in the evolving technologically-based economy.

Study of entry jobs for graduates of school vocational programs shows a gap between need for skills and skill development. This gap must be narrowed by revision of school programs and/or provision by business and industry of preservice and inservice training. Some of this gap is being closed by the adoption of schools by large industrial plants. Technical proficiency is provided by workers released to the schools. Students are motivated to stay in school to complete their academic and vocational training by promise of employment and interim paid apprentice positions. This picture contrasts with the low motivation evidenced by unemployed, out-of-school youth who resist training or retraining.

Industrial cooperation also assists in early identification of new types of job offerings for which different skills are required. Vocational and technical training centers have also been established at correctional institutions for young adults in order to reduce recidivism and to effect enough behavior change in inmates to turn them into useful citizens.

Programs vary greatly in the proportion of academic, guidance, and vocational elements they provide. It is not surprising, therefore, to note varying degrees of success when measured for school performance, attitudes and behavior, or skills development. Many programs which report little or no significant difference between participants in programs and members of related control groups

in academic work do show, nevertheless, increased school holding power. One of the most potent elements contributing to reduction of dropout rates is the extent to which the program provides individualization of instruction and guidance. Combined with satisfaction with concurrent work experience and assurance of employment after completion of training, individualization of instruction and guidance are the basic keys to successful programs.

A review of the ERIC documents shows the diversity of occupations for which programs have been offered such as automotive services, child care, office operations, manufacturing jobs, maintenance and repair, landscaping, horticulture, distributive tasks, building, metal, electrical, and other trades, agriculture, furniture building and repair, home economics, welding, television and radio repair, barbering, technical writing, park maintenance, health and hospital services, banking, computer services, gas station service, drafting, cosmetology. Only the armed services, which employ a sizable segment of out-of-school and post high school youths do not have prevocational programs offered in schools. The armed services themselves provide efficient and realistic literacy and skills programs for men in service. The success evidenced in military programs is due in part to the imposition of discipline and regimentation, which are often lacking in the lives of dropouts. Rebellion against authority in civilian jobs accounts for a considerable percent of failure.

Size of school system has a direct relationship to the comprehensiveness of vocational programs since small districts cannot offer the diversity of training needed by the community. The least that such schools should offer is a broad, general shop program to provide foundation skills which can be transferred to other specific tasks in industry.

There also appears to be evidence to the effect that successful training and work in one field leads to employment stability, not necessarily limited to that field. Prevocational work experience and entry jobs therefore should be viewed as steps in preparing the student for ultimate identification of satisfying employment situations. It is important to note that many youth, who experience satisfactory job training, look forward to and enter further vocational training programs.

The future of programs designed to prepare youth for employment depends, to a serious extent, on national and local unemployment levels. The young employee, especially from a minority group, is the first to be discharged and the last to be employed when competition rises for jobs. The future of job training programs, therefore, can be damaged by strategies based on the concept that a rise of unemployment is a necessary element in the control of the inflationary spiral.

DOCUMENT AVAILABILITY

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in microfiche (MF), or hard copy (HC). Microfiche is a 4 by 6 inch sheet of film containing up to 60 pages of text; special readers are required to read the microfiche. Hard copy is paper photo copy or facsimile of the original document, with the print size 70 percent of the original. It is packaged with a paper cover and is soft bound.

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DATA, COLLECTION, AND ANALYSIS

Cook, Fred S. Detroit Study of the Effectiveness of High School Education for Entrance into the World of Work. Detroit, Mich.: Business Teachers' Club of Metropolitan Detroit, 1963, 38p. ED 017 646 (MF - $0.25; HC - $2.00)

Primary objectives of this pilot project were to: (1) develop and test instruments for gathering data relevant to quantity and types of entry jobs available in a selected community and the concomitant talents demanded by business for these jobs, and (2) develop and test instruments for gathering data concerning work activities of recent dropouts and graduates. Ferndale, a community in the Detroit metropolitan area, was selected for the study. Three instruments were developed: (1) instrument "A" for studying all types of business and industrial firms in the community. From a total of 756 firms, 200 were drawn for a sample, and 154 interviews were completed. (2) instrument "B" for surveying those business and industrial firms which offered the greatest entry job opportunities. From a sample of 50, 88 percent were contacted. (3) instrument "C" for surveying recent school leavers to determine their employment patterns. From the graduation class of 1960 (366 students), 55 were selected randomly. Steps are outlined for selection of the three sample population. Conclusions were: (1) the techniques and instruments used in contacting a valid sampling of employers were appropriate and provided an effective means for determining the type, quantity, and requirements of the jobs available to students, and (2) the instruments used for followup of high school graduates were effective. Instruments and findings of the surveys are included.

Cook, Fred S. and Frank W. Lanham. Opportunities and Requirements for Initial Employment of School Leavers with Emphasis on Office and Retail Jobs. Detroit, Mich.: College of Education, Wayne State University, 1966, 222p. ED 010 054 (MF - $1.00; HC - $11.10)

The number and types of entry jobs available to high school leavers and the skills demanded by the employer as a prerequisite fro hiring were studied. Data were collected from employers and school leavers. All data were collected through the use of professional interviewers. These data will provide school personnel with the basis for making curriculum changes in business and distributive education subjects. There is a direct relationship between the size of the company and the number of entry jobs available for 16 to 21-year-olds with high school education or less. The larger the company, the more likely they are to have

entry-type jobs available. Innovative programs are needed to narrow the bridge between what employers want from 16 to 21-year-olds entering the labor market and what they get from schools' vocational programs.

Drake, James W., and others. Educational Attainment of Job Seekers Registered Employment with the Ohio State Employment Service, April 25, 1965. Ohio: State Bureau of Unemployment Compensation, 1965, 129p. ED 012 298 (MF - $0.75; HC - $6.45)

A survey of persons seeking employment through every public employment office in Ohio was designed to update and compare findings with results of a similar study conducted in 1962. Total job seekers registered for employment in 1965 numbered 132,350. In 1962, the total was 215,477. The decline of 39 percent was due in part to the shorter validity period (time within which applicants must revisit the local office to indicate continued availability) for the 1965 count in 22 local offices. More important, however, were generally improved employment opportunities. Nearly 62 percent of the job seekers were not high school graduates in 1962, compared with 60 pcercent in 1965. Among the youth under 20, the proportion who had not finished high school rose from 49 to 54 percent between the two counts. Job seekers under 20 totaled 14,394 in 1962 and 16,971 in 1965, representing an 18 percent increase. This was the only age group whose total did not show a substantial decline between the two counts. Of the total registered, one out of four had no formal education beyond the eighth grade, three out of five had no high school diploma, one-third had finished high school but did not go on to college, and fewer than one out of 12 had some college training. The appendix includes tables of data for each county in Ohio with the educational attainment of registered job seekers by occupational and age group in 1962 and 1965.

Feldman, Lloyd and Michael R. Peeney. Young Workers, Their Special Training Needs. Washington, D.C.: Manpower Administration, 1963, 25p. ED 011 897 (MF - $0.25; HC - $1.25)

Reviewed are the economic needs and status of non-college bound youth who need special training because of low income, race, physical and mental handicaps, juvenile delinquency, young marriage, incomplete education, or rural or migrant background. Two tables indicate: (1) the regional distribution of the labor force aged 14-19, projected to 1970, and (2) percentage of this age group enrolled in school in each state in 1950 and 1960. Charts present data on: (1) the level of education of the youth, (2) the increase in the teenage labor force, (3) a racial analysis of types of jobs held by high school graduates and dropouts, and (4) non-racial analysis of job categories in relation to years of schooling. It

is felt that the heterogeneity of the young workers seeking employment, market requirements, and the increase in youth population must be taken into consideration in planning programs realistically. This document is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Howe, Trevor G. and Kermit Buntrock. Occupational Problems and Vocational Training Needs of High School Drop-outs from Rural Areas in Iowa. Ames: Iowa State University of Science and Technology, 1966, 61p. ED 016 799 (MF - $0.50; HC - $3.15)

Of 224 dropouts identified from previous studies of 13,000 students in 109 high schools in 16 Iowa counties, 102 still in the state were personally interviewed to identify occupational problems and vocational training needs for the ten-year period following withdrawal from school. Nearly all of the dropouts were married and had children, were from large families and had brothers and sisters who had also dropped out, and a relatively high percentage were from rural communities. Males gave loss of interest or dislike of school and courses, and females gave marriage or pregnancy as major reasons for leaving school. Males attributed their year of unemployment since leaving school to adjustment and unemployment difficulties. The median income had risen from $59 per week for their first job to $109 for their current job. Nearly all claimed to be satisfied with present jobs. Over one-half of both males and females indicated interest in further job training, and 24 had already received some since high school. Males were interested in skilled craft areas and the specific areas of mechanics, agriculture, drafting, electronics, and welding. Females desired training in secretarial areas, cosmetology, medical technology, and nursing. Dropouts' suggestions for improving the schools included curriculum expansion to include various types of vocational-technical education, special teachers, classes for slow learners, more individual help, and better counseling. Tables of data and the interview schedule are included. This report appears in appendix of final research reports for project in "Research and Development in Vocational and Technical Education, Non-Metropolitan Areas," (ED 011 069).

Koval, Mary and Anita S. Vogel. Youth in New York City: Out of School and Out of Work, A Study of Employment and Education of Teenagers and Young Adults. Report. New York: New York City Youth Board, 1963, 44p. ED 020 956 (MF - $0.25; HC - $2.30)

Presented against the background of the characteristics of the New York City labor market are facts about the number of youths in the 16 to 24-year-old age group who are unemployed and not in school and about the school attainment of

New York City youth. A comparison of the school attainment and employment status of white and non-white youth is also provided, and projections are made about employment in the future. It was found that at least 72,200 out-of-school youths have job problems. Teenagers and school dropouts are most heavily hit by unemployment, especially Negroes and Puerto Ricans. Almost half the city's youth enters the job market without a high school diploma. Non-whites show a poorer record than whites in educational attainment, employment rates, and job levels. A rising youth population and a decreasing labor market for the unskilled and undereducated points to future aggravation of this problem. This document is also available for $1.00 from the New York City Youth Board, 79 Madison Avenue, New York, N.Y. 10016.

Oregon State System of Higher Education, Monmouth. Oregon Statewide Study of Systematic Vocational Education Planning, Implementation, Evaluation. Phase I: Manpower Needs, Data Collection Devices and Occupational Clusters. Final Report. 1967, 271p. ED 020 328 (MF - $1.25; HC - $13.65)

The objective of the study was to develop a dynamic system for inputing data on human and occupational resources for use in developing vocational education programs to meet current and future occupational needs. In the first of four phases, the objectives were to develop: (1) data gathering instruments designed to continuously assess human resources, employment opportunities, and educational programs, (2) a system for assessing job opportunities which cluster required job skills and mental processes, and (3) manuals of procedure for use by field personnel in administering data gathering instruments and employing the clustering system. Survey questionnaires to be used with students, dropouts, employees, employers, secondary school vocational programs, community college vocational programs, and proprietary schools were developed, field tested, analyzed, and modified. A two-dimensional clustering system which combined worker functions and processes was developed. Jobs in occupational areas representing mechanical, electrical, and symbolic skills were used as samples in developing task descriptions and numerical loadings from which clusters were formed. Guidelines were prepared for administering data gathering instruments and employing the clustering system. Included are: (1) detailed descriptions of instrument development, (2) a bibliography, and (3) extensive appendixes containing related information, an instrument analysis, the guide for administering instruments, the instruments, a supplement to instrument utilization, task descriptions, and classification loadings.

Parrish, Edwin H. A Look at Education for Work in the Omaha Public Schools. Nebraska: Omaha Board of Education, 1964, 153p. ED 017 648 (MF - $0.75; HC - $7.75)

The purpose of this study was to gather and evaluate pertinent information concerning vocational education in metropolitan Omaha, Nebraska. Information was gathered by questionnarie from eighth graders, ninth graders, twelfth graders, 1963 graduates, dropouts, parents, labor unions, apprentices, and business establishments. Students in the eighth grade indicated: (1) 52.8 percent intended to start college, (2) 14.6 percent intended to start post-secondary school, (3) 27.6 percent intended to finish high school, (4) 1.8 percent did not plan to start high school, and (5) 3.2 percent had no educational plans. Students in the ninth grade indicated: (1) 48.3 percent intended to start college, (2) 15.5 percent intended to start post-secondary school, (3) 32.4 percent intended to finish high school, (4) 1 percent did not plan to finish high school, and (5) 2.8 percent had no educational plans. Senior students of 1964 indicated : (1) 48.3 percent would start college, (2) 33.3 percent would work, (3) 8.4 percent would start post-secondary school, (4) 5.3 percent would go into the armed forces, (5) 2.2 percent would be housewives, and (6) 2.5 percent had no plans. Other statistical data are presented from the remaining sources. The 27 recommendations include: (1) business, industry, and labor should assist in strengthening an understanding for the program of vocational and technical education, (2) parents should have a more realistic understanding of the education from which their children can profit as well as the jobs they probably will be able to obtain, (3) schools should reevaluate the unrealistic values of prestige attached to academic courses, and (4) school districts should develop a pattern of matching federal, state, and local funds for vocational and technical education as provided by the Nebraska State Plan for Vocational Education.

Perrella, Vera C. and Elizabeth Waldman. Out-of-School Youth: Two Years Later, Special Labor Force Report Number 71. Washington, D.C.: Bureau of Labor Statistics, Department of Labor, 1966, 19p. ED 015 289 (MF - $0.25; HC - $1.05)

A group of young men aged 16 to 21 who had been interviewed by the Bureau of the Census in a nation-wide sample study of the early work experience of out-of-school youth in 1963 were resurveyed in February, 1965 to assess the relative socio-economic progress of the dropouts and the graduates. The resurvey included 2.4 million of the 2.7 million youths in the original sample. One of 20 of the dropouts and one of five of the graduates returned to school between 1963 and 1965. About 13 percent of the dropouts and 25 percent of the graduates had taken some formal job training other than vocational or other training received in regular schools. Only 4.9 percent of the men were not in the labor force in 1965 while

9.4 percent were so classified in 1963. Over one-fourth of the graduates, but only 11 percent of the dropouts, held white collar jobs. The data for all measures such as job held, unemployment rate, earnings, steadiness of employment, hours of work, and labor mobility showed that the men with more education made greater advances over the two-year period. A discussion of the sample design and methodology and 11 detailed tables are included. This document appeared in the "Monthly Labor Review," August 1966, and is available from U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C. 20210.

Wall, James E. Important Factors Concerning Human Resources in Mississippi. Preliminary Report No. 11. Mississippi: State College, Mississippi State University, 1966, 45p. ED 012 325 (MF - $0.25; HC - $2.25)

The more important characteristics of the State's human resources and information concerning vocational education programs are presented. Mississippi's population increased 21.6 percent between 1920 and 1960. Census data indicated: (1) birth rates are higher than national average, (2) death rates are close to the national average, (3) the shift from rural-agriculture to urban-industrial continues, and (4) migration losses have been depleting young adults, especially non-whites. Vocational programs in the secondary and post-secondary schools are designed for entry jobs and the retraining and upgrading of youth and adults. Courses are offered in: (1) agricultural education, (2) distributive education, (3) health occupations education, (4) home economics education, (5) trade and industrial education, (6) technical education, (7) business and office occupations, and (8) manpower training. The median for school years completed in 1960 was 8.9 years. School enrollment for 1964-65 was 606,200 and is projected as 602,700 for 1970-71. In 1964-65, $9,413,100 was spent for vocational education. Other tabular data are given for the population and vocational education.

PROGRAM PLANNING

Bertolaet, Frederick. Changing Education for a Changing World of Work, Midwestern Regional Conference on Education, Training and Employment. Chicago: Research Council of the Great Cities Program for School Improvement, 1966, 53p. ED 019 443 (MF - $0.25; HC - not available from EDRS, available from publisher for $2.00)

In response to the employment needs of youth in present-day society, the Research Council sponsored a series of regional conferences to mobilize and coordinate resources to: (1) better prepare youth for jobs, (2) remove obstacles to their employment, (3) coordinate the activities of business, industry, and education in preparing youth for work,(4) eliminate the time lag between the identification of new job opportunities and the inclusion of preparation programs in the schools, and (5) provide for a specific delineation of job skills and knowledge needed for various job responsibilities. Sixty-six representatives of business, industry, labor, government, civic groups, and schools from midwestern cities attended the Chicago conference. Speeches presented were "Community Cooperation for Manpower Development" by J. Tuma, "Vocational Preparation for Inner City Youth" by K. Wientge, "Preparation for the World of Work: What the Schools Should Do" by H.S. Loving, "The Early School Leaver: What Are the Employment Opportunities" by D.R. Forest, and "The Way Ahead, Youth and Vocational Education" by L.A. Emerson. The discussions which followed each speech are summarized.

Brennan, Thomas J. Industrial Arts and High School Dropouts, A Report Prepared at the Request of the Honorable Dallas Wolfe, State Senator. West Virginia: Senate Education Committee, 1963, 24p. ED 018 552 (MF - $0.25; HC - $1.30)

Several proposals for alleviating the dropout problem are presented. Students leave school because of failure and retardation in school, dislike of school, home circumstances, marriage, conflicts with teachers, feelings of rejection, need to work, military service, and health. While in school, the potential dropout is usually shunted into a curriculum area where he causes the fewest administrative problems, and unless he suceeds there, he probably gives up and leaves school. Vocational education as a solution to the dropout problem is not feasible because the small schools of West Virginia cannot support broad vocational programs. A review of recent studies led to no concrete evidence of the value of any non-academic subject over other subjects in holding power. Published statements and personal

contacts with a representative number of educators indicated the possibility that industrial arts could have holding power. An industrial arts program can be structured to serve all students. Proposals are: (1) a broad general shop program should be implemented in junior high schools, (2) general shops in high schools should be adequate so that all who desire can enroll, (3) unit shops should be established where students' needs justify them, (4) adequate funds should be provided, and (5) a state supervisor of industrial arts should be appointed to see that these provisions are carried out in each district.

Edgerton, Harold A. and Robert W. Sylvester. The Prediction of Outcomes of MDTA Programs, A Pilot Study. Washington, D.C.: Performance Research Inc., 1966, 38p. ED 010 011 (MF - $0.25; HC - $1.90)

An extension of knowledge of the factors related to trainee dropouts in Manpower Development and Training Act (MDTA) programs was attempted. The factors related to success of MDTA programs were computed for organizational and procedural characteristics of the trainees. Both retention and placement show significant correlation with characteristics of the program organization and program management, enough so that efforts to improve the standing of an MDTA program, either as to its retention or its placement, should be fruitful. The real problem is that of making the programs fit the trainees rather than trying to select trainees to fit the training programs. The next step is to study more intensely the effects of program organization and administrative and instructional practices on both retention and placement.

Green, John A., and others. New Horizons in Developing Vocational Educational Programs in Small High Schools in Small Districts. Moscow: Idaho University, 1965, 87p. ED 003 494 (MF - $0.50; HC - $4.35)

The activities of a summer workshop on vocational education programs were reported. Four leaders were chosen to lead small group sessions. The topics discussed were: (1) developing curriculum and administrative patterns for operation of prevocational education in the high school, (2) isolating and identifying researchable problems, (3) creating a pattern for evaluation of emerging programs, and (4) studying and determining the training needs of youth. The results of the conference were summarized and evaluated.

Haines, Peter G., and others. Improving Vocational-Technical Education in the Top O' Michigan Area. East Lansing: Bureau of Educational Resources, University of Michigan, 1965, 184p. ED 011 284 (MF - $0.75; HC - $9.20)

Six counties in the northern part of the lower peninsula of Michigan were studied to determine needed vocational and technical education programs, and to propose a feasible plan for these programs. A team of researchers collected data through surveys, interviews, group meetings, and inspection of facilities and equipment. Tables and data show: (1) classification of sample occupations, (2) population change, (3) secondary enrollments by grade level, 1964-65, (4) employed workers by major occupations, (5) occupational interests of eleventh graders and their parents, (6) residence of high school graduats and dropouts two years after graduation, and (7) present and proposed programs of distributive education, home economics education, industrial education, and education for office and agricultural occupations. The investigator recommended that: (1) the two intermediate school districts should establish three area vocational schools, (2) the intermediate districts should create an occupational counseling program for adults, (3) school districts with enrollment under 300 should not operate vocational programs, but should utilize the shared-time program with the area vocational school, and (4) North Central Michigan College should develop degree-level technical and subprofessional curriculums through formation of a Division of Technical Education.

Karageusian, Mugitch A. Exploration of the Problem of Training and Retraining the Unemployed, A Summary Report. Ann Arbor: School of Education, University of Michigan, 1963, 25p. ED 012 751 (MF - $0.25 HC - $1.25)

In the fall of 1961, there were approximately 300,000 unemployed in Michigan. About half of these were located in the Detroit metropolitan area. Of the 61.8 percent who had not completed high school, 30.1 percent dropped out during grades 9-11, and the remainder had eight years or less of education. Some attempts to relieve the unemployment situation have been made by the Michigan Employment Security Commission, the Mott Foundation Retraining Program in Flint, union-management agreements, and federal legislation. The low response of the unemployed to retraining programs clearly indicated a motivation problem. Most of the unemployed contacted about a retraining program in West Virginia were not interested, expected to be called back to work soon, or felt they were too old to be starting over again. The vocational training facilities and personnel in public schools must be effectively used to help alleviate the present unemployment emergency. Training must be undertaken with the cooperative efforts of the school and the community. Schools must be reorganized to meet the needs of both students and society at large.

Mahlstede, John P., and others. Project in Research and Development in Vocational and Technical Education: Non-Metropolitan Areas. Appendix of Final Research Reports. Ames: Iowa State University of Science and Technology, 1966, 256p. ED 011 069 (MF - $1.00; HC - $12.80)

Reports were submitted of eight research projects conducted by different principal investigators who investigated research and development activities in vocational and technical education for non-metropolitan areas. The reports treated such subject areas as the decision-making process of school districts, occupational problems and vocational training needs of high school dropouts, interrelationship of home environment and employment, manpower requirements and demand in agriculture, the contribution of psychology to interdisciplinary research, determinants of post-high school educational and occupational choices, legal and political strategies for implementing vocational programs, and predictions of change in technology, jobs, and vocational training needs. (For report of the project see below.)

Thomas, Robert W. Research and Development in Vocational and Technical Education: Non-Metropolitan Areas. Ames: Iowa State University of Science and Technology, 1966, 69p. ED 011 068 (MF - $0.50; HC - $3.45)

A strategic intelligence unit and a research activities unit were the two main components of this project for research and development in problems of vocational and technical education for non-metropolitan areas. Problem conceptualizations and interdisciplinary research were the activities of these two project components. The primary function of the strategic intelligence unit was to provide information regarding vocational and technical education and to concern itself with perception, assessment, and articulation of the existing social environment as it impinges upon vocational and technical education. The research activities unit, designed to research problems of education for non-metropolitan areas, pursued activities in human resource development, occupational opportunities, and educational resources development and training. (See Mahlstede above for research reports.)

PROGRAM DESCRIPTIONS

Chansky, Norman M. Untapped Good; The Rehabilitation of School Dropouts. 1966, 280p. ED 030 807 (Not available from EDRS, available from Charles C. Thomas, 301-327 East Lawrence Avenue, Springfield, Ill. 62703)

Operation Second Chance trained school dropouts for vocational skills in three areas in North Carolina: the mountainous West, the Piedmont plains, and the coastal farmlands. Length of the training varied from the six weeks nurses' aide program to the 12-week sewing for upholstery program through the 16-week carpentry, upholstery, welding, pre-apprentice bricklayer, and auto service station mechanic programs. Many trainees improved in reading and writing and became employed, particularly at the Piedmont training site. In Appalachia trainees were not discontented and could not separate themselves from their homelands. In eastern North Carolina, trainees viewed their poverty as undesirable and themselves as marginal members of their communities; they were eager to leave. The relationship which a dropout has to the rest of the community depends largely on the community itself; in the Piedmont, the dropout could earn respectability by his hard work; in the east, one's status was determined at birth; and in the west the dropouts belonged to the same class with most citizens and did not have to exert effort to gain status. Whether a trainee has to work for his recognition will have a determining influence on his behavior in the program.

Chapman, Jane R. Oak Glen, A Training Camp for Unemployed Youth. Washington, D.C.: Office of Manpower Policy, Evaluation and Resources, 1966, 71p. ED 015 321 (MF - $0.50; HC - $3.65)

A training camp for unemployed youth near Riverside, California is described in this summary of a detailed report, "An Evaluation of the Concept of Trainee Camps for Unemployed Youth," prepared by the Stanford Research Institute (SRI). Youth between 16 and 21 years of age, not in school, and with little chance of employment because of lack of skills, knowledge, or abilities participated in the program. The objectives of the SRI study were to determine: (1) the proportion of trainees who found employment or enrolled in further training, (2) the extent to which trainees who entered the program but terminated before completing may have benefited from their experience, (3) factors in the camp experiences which benefited the trainees, and (4) the characteristics of the trainees. Data, chiefly from camp files, were obtained on 77 current trainees, 113 graduates, 207 trainees who terminated prior to the completion of the program, and 82 who were accepted but did not attend. The rate of termination of trainees before graduation was 60 percent. Almost 70 percent of the graduates were employed, compared with approximately 55 percent

of the terminees. Factors which seemed to benefit trainees were: (1) receiving praise, rewards, and individual attention, (2) improving physical condition through training and diet, (3) increasing reading and math proficiency, and (4) in some cases, learning to work under discipline and regimentation. An annotated bibliography is provided. Copies of this document are available from Manpower Administration, Office of Manpower, Policy, Evaluation, and Research, U.S. Department of Labor, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20210.

Detroit Public Schools, Michigan. Department of Research and Development. Evaluation of the In-School Youth Work-Training Project for Fourteen and Fifteen Year Old Youth. 1968, 25p. ED 026 501 (MF - $0.25; HC - $1.35)

A project to provide in-school work experiences for 14 and 15-year old junior high school students was conducted for the purpose of: (1) encouraging them to remain in school after the age of 16, (2) improving their school attendance and scholastic achievement, (3) providing opportunities for growth in the ability to work and explore aspects of the world of work, and (4) providing income, sound work habits, work training, and sellable skills for pupils from low income families. Data from the fall term of 1966 on 140 pupils who had participated in the program were compared with data from the fall term of 1965. A follow-up was conducted on 42 students who had participated in the project. The chi-square test of significance show no statistically significant changes in the frequency counts of absences or tardiness or changes in the distribution of academic grades or citizen marks. Case studies indicate that individual students did show progress in academic performance, in attitude toward school, and in social demeanors. In general, the program met only the objectives of providing earned financial assistance to needy pupils and providing pupils with supervised work experiences which will better prepare them for entry into the world of work.

Jeffery, C. Ray. Development of a Program to Prepare Delinquents, Disadvantaged Youths and Slow Learners for Vocational Education. Final Report. Washington, D.C.: Washington School of Psychiatry, 1967, 194p. ED 019 498 (MF - $0.75; HC - $9.80)

The social and educational rehabilitation of high school dropouts with delinquent records was attempted by reinforcing behavior associated with academic remediation, work preparation, and social conduct. Of the 163 Negro youths who participated at some time during the program, only 42 were actively participating when the program terminated, and the range of participation for this latter group was from 16 weeks to 130 weeks. Subjects were enticed to the project by offers of food and refreshment and, once there, were offered a system of rewards, including money, for completing educational and occupational tasks. Weekly earnings

ranged up to $40 for successful participation in remedial programed instruction ranging from third to twelfth grade levels and classroom and work activities. Academic progress was achieved in mathematics, English, social studies, science, and reading, and 13 of 22 participants who took the general educational development test passed, thus being certified as high school graduates. Work crews of eight to ten participants were supervised in refurbishing slum housing as general work preparation. A recreation program for students was a total failure. There was little success in efforts toward employment or job training, and there was no evidence that the antisocial or delinquent behavior of the group was diminished to any significant extent. The participants were primarily interested in "beating the system." It was concluded that delinquency, under-education, and unemployment are related to each other and to other variables in such a way that a change in one variable will not necessarily produce a change in others.

Joseph, M.P. and R.E. Almen. Forty-five Returnees to Regular High Schools. Minnesota: Work Opportunity Center, Minneapolis Public Schools, 1968, 16p. ED 027 581 (MF - $0.25; HC - $0.90)

The Work Opportunity Center (WOC) is geared to provide occupational skills training, related instruction, counseling, and personal services to youth 16 to 21 years of age. Many of these boys experienced learning difficulties in the traditional school setting and withdrew from school. In addition to providing work orientation, the WOC encourages those with a desire to return to a regular high school for their diploma. This study focuses on a group of 45 dropouts who came to WOC, then returned to other schools. Of the 45, 56 percent were still in school at the time of the survey, having established better attendance records earlier than the second-time withdrawals, and 77 percent of the persisters were passing. Over half received positive comments on school adjustment. WOC was seen as helpful in their decision to return, helpful in earning credits, and helpful with personal problems. Those who had withdrawn the second time saw the future as less bright, more uncertain, and felt more general unrest than the persisters.

Lincoln High School, St. Louis, Missouri. Lincoln High School, The Opportunity School. 1967, 15p. ED 017 605 (MF - $0.25; HC - $0.85)

Three separate documents describe a special high school which offers motivation and academic or vocational preparation to students who are unable to function within a regular high school program. Academic failure, absenteeism, or behavior problems were the usual reasons for a student's dismissal from his regular school. It is anticipated that as a result of the program these students will return to their regular high schools

or gain successful employment. Work experience in actual jobs is an important aspect of the program. To increase pupils' mastery of the basic skills, instruction is provided in reading, writing, language arts, and mathematics. Pupils are allowed to progress at their own rate in non-graded courses which are offered at varying levels of difficulty. The student's ability is measured by the Iowa Test of Basic Skills which he takes when he enters the school. The school's professional staff consists of 21 teachers, five counselors, two administrators, two social workers, a nurse, and a librarian. A copy of the student newspaper is included.

McKee, John M., and others. MDTA Vocational Experimental-Demonstration Project for Training and Placement of Youthful Offenders. Twelfth Progress Report, Auto Service Station Mechanic-Attendant Course. Elmore, Alabama: Rehabilitation Research Foundation, 1966, 130p. ED 013 421 (MF - $0.75; HC - $6.50)

The demonstration project at Draper Correctional Center aims to show that vocational training leading to employment, intensive counseling, basic education classes, and a program of community sponsorship of releasees can decrease the rate of recidivism and effect enough behavior change in inmates to turn them into useful citizens. Training objectives are: (1) to teach a group of youthful offenders a trade (courses offered are welding, radio and TV repair, appliance repair, auto mechanics, barbering, bricklaying, and technical writing), (2) to construct programed materials, (3) to assess ways to improve training and insure placement and guidance of trainees after parole, and (4) to make training material available to other institutions. Supplementary classes are given in remedial reading and personal-social skills. The auto mechanics course, reviewed in detail in this report, was developed around commercial training materials including a programed text. Needs of area employers, availability of equipment, and the capabilities of trainees were considered in course planning. A follow-up study of the college students who have been employed as subprofessionals in work-study programs is underway to determine the effect of their work at Draper on their college and careers.

Office of Education, Washington, D.C.; Connecticut State Department of Education, Hartford; and Norwalk Board of Education, Connecticut. A Pilot Project to Develop a Program of Occupational Training for School Alienated Youth. Interim Report and Statistical Evaluation. 1967, 167p. ED 016 868 (MF - $0.75; HC - $8.45)

A total of 272 school alienated youth, dropouts and potential dropouts, were served by the center between November 1965 and June 1967 in the following vocational areas: automotive services, child care, food services, health services, retailing

services, office operations, manufacturing operations, maintenance and repair, and landscaping and horticulture. Students attended classes three hours and were placed in part-time employment four hours each day. An informal evaluation showed that 96 percent of the students were working to the complete satisfaction of their employers, 71 percent in jobs directly related to their training. Over 50 percent obtained their jobs through the school placement services. Some of the conclusions based on a review of case studies, observations, and community reaction were: (1) dropouts will return and can succeed in a curriculum that meets their needs, interests, and aptitudes, (2) disaffection for school can be changed, (3) peer relationships stimulate healthy personal and social adjustments, (4) parents can be involved, and (5) business and industry are pleased with the program. Additional reports included are: (1) "An Analysis of One Hundred Case Studies," (2) "The Arrangement of Alienated Students into Diagnostic Formulations and Its Relevancy to Counseling in a Center For Vocational Arts," (3) "Report of the Consultant For Basic Education," which reviews the curriculum development activities, student characteristics, and factors affecting learning and attitudes, and (4) "An Evaluation of The Norwalk Occupational Training Program." A brochure explaining the program is attached.

Rajan, G. Soundara. A Study of the Registered Apprenticeship Program in Wisconsin. Madison: University of Wisconsin, 1966. ED 014 020 (Not available from EDRS, available from Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison 53706).

Thisstudy of Wisconsin's Apprenticeship Program in building, metal and other trades describes the roles of unions, employers, advisory committees, vocational schools, and the state. It analyzes registrations, completions, and dropouts, and reports the opinion findings from responses to questionnaires sent to apprentices, dropouts, and employers. Improved instruction, training and wages were felt needed by apprentices. Working conditions, layoffs, and low wages were major reasons for dropouts. Unfavorable business conditions, high cost of training, and union interference had hindered employer participation. The study recommends that: (1) evaluations of the program be made in terms of protecting minors, developing better trained workers, evoking greater employer participation, and reducing dropouts, (2) Wisconsin's program objectives be restated as part of an overall national manpower and training effort, (3) its apprenticeship division be additionally charged with responsibility for initiating and carrying out programs in cooperation with other agencies, and (4) research be carried out. Proposals for further research are made.

Rull, Marvin H. And Richard O. Moore. A Demonstration Training Program for Potential School Dropouts. A Service Station Training School for Dropout-Prone Students. Illinois: Quincy Public School District No. 172, and Southern Illinois University, 1968, 82p. ED 026 526 (MF - $0.50; HC - $4.20)

One phase of the curriculum demonstration program sponsored jointly by the Quincy Public Schools and Southern Illinois University is the Service Station Training School described within this report. The Service Station Training School was one of several sheltered work stations which were developed to provide preemployment experiences and training for dropout prone students. Objectives of the program included: (1) reduction of dropout rate by making in-school experiences more meaningful, (2) preemployment classroom training prior to actual need for employment, (3) an opportunity to emphasize desirable work habits and attitudes, and (4) motivation of the student by providing a wage earning opportunity in connection with his school experience. The Service Station Training School has served approximately 100 students since its beginning, approximately 30 within any one school year. Followup of students completing the program indicate that only three are employed in work allied to the service station; however, none are listed as unemployed.

Schrank, Rober and Fred Lorber. The Bloomingdale Project, Report of a Demonstration On-the-job Training Program. New York: Mobilization for Youth Inc., 1964, 21p. ED 012 290 (MF - $0.25; HC - $1.05)

An experimental training program tested two hypotheses: (1) unemployed minority group youth with training and reinforcement could succeed in jobs in middle-class settings and (2) high school graduates would be more successful than dropouts in competing for jobs, but dropouts also would benefit from the training program. In New York City, Mobilization For Youth (MFY), Bloomingdale's department store, and a local union cooperated in this project for 29 young people, aged 17 to 22, who were literate at the seventh-grade level. A three-month training period consisted of orientation to department store work, specific formal skill training, and direct supervision by a MFY staff member who had supportive, counseling, and liaison functions. Orientation meetings included role playing and instruction on how to act while applying for a job. One important feature of the project is its salary-sharing plan: one half paid by MFY, the other half by the store. This scheme helps to open up the job market for MFY's program and enables MFY to act as a bargaining agent. The success of the project was shown by followup figures: (1) 14 of the ultimate trainees were regularly employed six months later and (2) among dropouts, only one person who wanted a job was unemployed. The six trainees who were school dropouts and who would not normally have qualified for jobs were either working or back in school.

PROGRAM EVALUATION AND FOLLOW-UP

Austin, John J. and Donald A. Sommerfeld. An Evaluation of Vocational Education for Disadvantaged Youth. Michigan: Muskegon Public Schools, 1967, 212p. ED 016 097 (MF - $1.00; HC - $10.70)

Objectives of this study were to assess the overall effect of vocational and basic education on disadvantaged youth and to identify the patterns of change taking place in different categories of disadvantaged trainees. An experimental group of 189 trainees in the Muskegon Area Skill Training Center was compared with a control group of 89 non-trainees or early dropouts. Pre- and post-tests were used to measure changes in intelligence and aptitudes, basic skill achievement, and personality characteristics, and occupational status was compared. Using pre-training scores as a base, the mean scores for trainees were significantly higher after training when achievement, intelligence, occupational status, personality, interpersonal relations, and aptitude were measured. Trainees showed a significantly higher rate of improvement than non-trainees in achievement, intelligence, occupational status, and personality. Girls, older trainees, trainees with higher formal education, trainees with a high original I.Q., and trainees with dependents did not show a greater improvement than their opposites. The appendix includes: (1) a description of measurement procedures and instruments, (2) course outlines from the training center, and (3) tables of raw data.

Illinois State Board of Vocational Education and Rehabilitation and Southern Illinois University, Carbondale, School of Technology. Cooperative Supervised Job Training Program, The Final Report and Evaluation. 1966, 54p. ED 014 540 (MF - $0.25; HC - $2.80)

A three-year Cooperative Supervised Job Training Program was initiated to study the effects of supervised job training on low academic achievers and persons who had definite needs for vocational preparedness immediately upon leaving school. Four schools from three school districts participated in the pilot programs: Robinson High School, Maine Township East and West High Schools, and Drake Vocational Guidance and Education Center. Tables show the percentage of student data supplied on pupil records by each coordinator, objective family statistics, average student dispersion, trends in student hourly wages, hours worked per week, trends in wages for the first and second years of followup, and employment followup of graduates of the four programs. The findings generally supported

the premise that the program meets the needs of selected students and the needs of the commmunity. The 18 recommendations for improving the program cover record keeping, selection of students and coordinator, use of instructional materials, and correlating techniques.

Karnes, Merle B., and others. The Efficacy of a Prevocational Curriculum and Services Designed to Rehabilitate Slow Learners Who Are School Dropout, Delinquency, and Unemployment Prone. Final Report. Illinois: Champaign Community Unit 4 School District, 1966, 157p. ED 016 106 (MF - $0.75; HC - $7.95)

It was hypothesized that 91 experimental subjects from low socioeconomic status homes, provided with a carefully designed two-year vocationally-orientated educational program and Prevocational Division of Vocational Rehabilitation (DVR) counseling, would have significantly superior achievement to that of a matched control group enrolled in a regular educational program without such benefits. Data were collected from school records, interviews, case studies, various psychological tests, and DVR records. The experimental subjects had significantly better attendance and fewer school dropouts, and made a better vocational adjustment than the control group. There was no significant difference between the two groups in social and emotional adjustment, as measured by social maturity, perception of peer acceptance, perceived anxiety, and ability to determine the appropriateness of certain activities or goals. Achievement test scores for the tool subjects of arithmetic, reading, and spelling showed no significant differences between the two groups in amount gained. Some implications for program implementation were that specially trained administrative and teaching personnel should be employed for this kind of program, the ratio of teacher to youth should be no greater than one to 20, and the curriculum should be functional, individualized, and vocationally-oriented. A review of related literature, a complete program description, and recommendations for further research and programing are included.

Magisos, Joel. Occupations of Former Vocational Agriculture Students in the State of Washington. Pullman: Department of Education, Washington State University and Olympia: Washington State Board for Vocational Education, 1966, 23p. ED 018 542 (MF - $0.25; HC - $1.25)

The objectives of the study were to determine the occupational status of former students, the extent to which their employment was related to training in vocational agriculture, the effect of enrollment tenure on eventual employment, and

the employment rate. The sample from 12 schools included 794 former students, who graduated or dropped out of high school during the school years 1955-56, 1958-59, 1961-62, and 1964-65. Of the former students, 10.78 percent were in full- or part-time farming, 15.75 percent in off-farm agricultural occupations, and 11.95 percent in mechanical occupations. Of the total sample, 24.19 percent were unavailable for employment, military service being the principal reason. Unemployment was 0.33 percent, representing only two individuals. Less than four percent of the former students were unknown to the data gatherers. It was concluded that: (1) 38.47 percent of the former students were in occupations related to vocational agriculture, (2) longer enrollment in the program seemed to increase chances of eventual employment related to vocational agriculture, and (3) unemployment among former students was negligible.

Rodgers, John H. Occupations of South Carolina's Vocational Agriculture Students Completing a Prescribed Course, 1959-63. South Carolina: Department of Agriculture, Clemson University, 1964, 19p. ED 018 559 (MF - $0.25; HC - $1.05)

The purpose of the study was to determine the occupational status of students with at least two years of vocational agriculture who graduated or left school during 1959-63. Data on 21,148 former students were collected by questionnaires from nearly all of the vocational agriculture teachers in the state. It was found that, of those available for employment, over 57 percent held agricultural jobs, and less than 43 percent were in non-agricultural jobs. Of those employed in non-farm occupations, 2,325 were identified as having benefited from vocational agriculture. Over 13 percent of the entire group were in the armed forces, seven percent were attending colleges, and nine percent were unknown, deceased, or unemployed. Over 40 percent of those in the armed forces were in farming prior to induction.